



STATE OF WASHINGTON
DEPARTMENT OF AGRICULTURE

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Best Practices to Control Q Fever

The purpose of this document is to outline appropriate actions and management practices to protect public health by reducing exposure to *Coxiella burnetii* (the bacteria that causes Q-fever), to educate potentially exposed persons regarding Q-fever transmission, to limit the spread of *Coxiella burnetii* in herd owner's livestock, and to detect suspect animals as soon as possible. These management practices are necessary to protect public health and animal health and it is the responsibility of the herd owner to comply with these standards.

BEST MANAGEMENT PRACTICES:

- The highest risk for human illness is due to contact with contaminated birth products (e.g., placentas, fetuses, amniotic fluids) therefore when handling these products you should:
 - Use Personal Protective Equipment (PPE):
 - Disposable gloves,
 - N95 mask or similar mask (available at most local hardware stores),
 - Remove immediately and:
 - Placed in a sealed, double-bagged trash bag, and disposed by incinerating or
 - Burying with a depth of at least 3 feet of soil.
- If composted, keep in an area well away from people and animals for several weeks. After a few weeks, turn the exposed surface inwards and allowing it to heat up for several more weeks. After stacking and composting for as long as possible, it may be spread on land used for livestock and crops. Additional references on composting are at the end of this document.
- Do not sell manure to the public or use in garden areas.
- The birthing area should be immediately cleaned of all organic matter prior to using again and 1:10 dilution of household bleach plus detergent, a 5% solution of hydrogen peroxide or a 1:100 dilution of Lysol ®. A 30 minute contact time is recommended for all disinfection agents.
- Concrete floors and steel fences are recommended for ease of cleaning and disinfection.
- Avoid cleaning out buildings and moving soiled bedding on windy days. If using a high pressure washer after mucking out, dampen down first using a low pressure spray to decrease production of fine aerosols and wear a mask/respirator.
- Practice good rodent control; keep dogs and cats away from birth products.
- Control ticks on livestock.
- Pregnant animals close to parturition or animals that have given birth within 2 weeks should not be moved off of the farm.
- Consumption of only pasteurized dairy products is recommended.

BIOSECURITY:

- Limit visitors' access into the livestock holding areas or barns unless necessary.
- People at high risk for severe Q-fever illness (e.g. pregnant women, immunosuppressed persons, and persons with heart valve defects) should not be allowed access into the livestock holding areas or barns. People in these groups who contract these bacteria are at higher risk for severe and chronic disease.
- Inform all visitors of these 3 high risk groups and if the visitors are in a high risk group they should not be allowed in the barns because of their medical condition.
- Hands and arms should be washed thoroughly using warm water and soap after animal contact. If soap and water are not available, then alcohol based hand sanitizers are a good second choice to use.
- Clothing worn by farm workers in livestock holding areas or barns should be removed immediately after leaving the areas and washed in hot water using any commercial laundry product. **These clothes should not be worn into your home because of the strong possibility of tracking contagious bacteria into the house.**
- Boots should be cleaned and disinfected or disposable boot covers should be used.

ANIMAL RECORDS:

- Maintain a detailed registry which should record all livestock on the premises and history of adverse pregnancy event (APE).
 - **An APE is defined as** an abortion, stillbirth, or birth of a weak newborn. The criteria for notification of these events in herds with >100 animals is higher than 5% of pregnant animals. For herds with ≤100 animals, a criteria of ≥1 events in a 60 day period applies.
- This record should be updated whenever an animal is bought or sold. Sales records of individuals who purchase or lease livestock from you including names, addresses, date of transaction and animal sold should also be maintained. This would be very similar to records required for meeting scrapie rules.

ANIMAL MOVEMENTS:

- Adhere to Animal Health regulations when buying, selling, importing, and exporting sheep and/or goats. If animals are obtained from out of state, this shall include obtaining a health certificate, import permit, and meeting any additional requirements specific to the species being imported.
- Learn the health history of newly purchased animals, particularly history of recent APEs. Consider Q-fever testing of newly purchased animals, followed by segregation from the rest of your herd for 30 days, and then retesting prior to commingling with your established herd.

SURVEILLANCE/TESTING:

- Q-fever is not uncommon in livestock and animal testing has limitations; therefore culling of animals based on serologic (blood) testing is not recommended as this will NOT ensure a negative herd. A positive Q-fever blood test does not mean that the animal is actively shedding the bacteria and a negative Q-fever blood test does not mean the animal is *not* currently shedding the bacteria. Blood tests reflect the level of past exposure at the herd level and should not be used to determine the fate of individual animals.

- Contact your local veterinarian and the Washington State Department of Agriculture if an adverse pregnancy event (APE) occurs in your herd.
- A full abortion workup is required and placenta is very important. Your veterinarian can provide more information.
- Q-Fever is a reportable disease in Washington, and you are legally obligated to report it to the Washington State Department of Agriculture when it occurs in your herd or flock. If you suspect you are experiencing illness in your herd or flock due to Q-fever, immediately provide notice to WSDA at 360-902-1878.
- If an animal on your farm experiences an APE that has been confirmed as due to Q-fever, immediately contact the Washington State Department of Health at 206-418-5500 to inform them of potentially exposed visitors to your farm.

EDUCATION:

- All persons who purchase/lease livestock from you or allow their livestock to board at your farm should be informed of the potential risk of Q-fever transmission from livestock and of existing educational material available (i.e. Q-fever Information and CDC Q-fever FAQ Sheet).
- Provide visitors, especially those who enter the barns and livestock holding areas, with educational material (i.e., the CDC Q fever FAQ sheet).
- Any visitor to your farm that develops an unexplained illness with fever should be informed of the risk of Q-fever transmission from livestock.

Additional resources that may be useful to control the infection and infective materials:

Composting must be conducted in compliance with chapter 70.95 RCW and chapter 173-350 WAC and chapter 16-25-025 WAC, Routine disposal.

From Cornell Waste Management Institute - [Composting](#)

Natural Rendering: Composting Livestock Mortality and Butcher Waste - [pdf](#)

Composting Manure and Other Organic Residues (NebGuide G1315, 2006) - [pdf](#)

Farm-scale Composting Resource list – <https://attra.ncat.org/attra-pub/farmcompost.html>

Michigan Animal Tissue Compost Operational Standard (2007) - [pdf](#)

Disinfection Guides:

From [Center for Food Security and Public Health](#), Iowa State:

Q-Fever

Disinfection 101 -

<http://www.cfsph.iastate.edu/BRM/resources/Disinfectants/Disinfection101.pdf>

Implementing a Disinfection Action Plan – pgs. 13 – 15.

Another:

Boot Cleaning and Disinfection - <http://www.biosecuritycenter.org/article/bootDisinfect>

Hand washing Guides:

CDC [Handwashing: Clean Hands Save Lives](#) - <http://www.cdc.gov/handwashing/>